

B

Surprisingly, we have found that melatonin and/or chemically modified derivatives thereof, when used according to the invention,

- realize their insulin-reducing influence through G- protein-coupled membrane-bound receptors;
- through the melatonin receptor assume pacemaker significance, because the release of insulin from isolated pancreatic islets underlies the circadian and ultradian rhythms;
- through the melatonin receptor, in pharmacological (5 μ m) as well as in physiological doses (0.2 nm), reduce the stimulated release of insulin from pancreatic islets in statistically significant manner.

[illegible]